

IN THE CLAIMS:

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1-15. (Canceled)

16. (Currently amended) A computer comprising:

a plurality of processes, wherein the plurality of processes service a destination address and have process addresses;

a packet routing layer, wherein the packet routing layer routes ~~[[a]] packets to the plurality~~ to the plurality of processes using a destination addresses within the packets;

a dispatch layer between a TCP layer and an IP layer, wherein the dispatch layer has a plurality of modes of operation including:

a first mode of operation in which the dispatch layer receives a packet from a client, wherein the packet includes the destination address;

a second mode of operation, responsive to receiving the packet, in which the dispatch layer identifies a process within the plurality of processes to service the client, wherein the process is an identified process;

a third mode of operation in which the dispatch layer translates the destination address to a process address for the identified process within the plurality of processes; and

a fourth mode of operation, responsive to the third mode of operation, in which the packet is sent to the packet routing layer.

17. (Original) The computer of claim 16, wherein each packet includes a source address and wherein the dispatch layer further includes:

a fifth mode of operation in which the dispatch layer receives a packet from the identified process for the client; and

a sixth mode of operation, responsive to the fifth mode of operation, in which the dispatch layer translates the source address in the packet of the destination address.

18. (Currently amended) ~~The computer of claim 16,~~ A computer comprising:

a plurality of processes, wherein the plurality of processes service a destination

address and have process addresses;

a packet routing layer, wherein the packet routing layer routes packets to the plurality of processes using a destination addresses within the packets;

a dispatch layer between a TCP layer and an IP layer, wherein the dispatch layer has a plurality of modes of operation including:

a first mode of operation in which the dispatch layer receives a packet from a client, wherein the packet includes the destination address;

a second mode of operation, responsive to receiving the packet, in which the dispatch layer identifies a process within the plurality of processes to service the client, wherein the process is an identified process;

a third mode of operation in which the dispatch layer translates the destination address to a process address for the identified process within the plurality of processes; and

a fourth mode of operation, responsive to the third mode of operation, in which the packet is sent to the packet routing layer, wherein the second mode of operation includes:

a first submode of operation in which a determination is made as to whether a connection exists for the client;

a second submode of operation, responsive to a determination that a connection is absent for the client in the first submode of operation, in which a connection is created and a process within the plurality of processes is assigned to service the connection, wherein the process is the identified process; and

a third submode of operation, responsive to a determination that a connection exists for the client, in which a process assigned to the connection is identified and forms the identified process.

19. (Original) The computer of claim 16, wherein the packet routing layer is a transmission control protocol layer.

20. (Original) The computer of claim 16, wherein the plurality of processes is a plurality of server daemons.

21-37. (Canceled)

38. (Currently amended) A computer program product for routing packets from a client to a selected process within a plurality of processes servicing a connection between the data processing system and the client comprising:

a computer readable medium;  
first instructions for receiving a packet for the connection between the data processing system and the client, wherein the packet includes a destination address; and  
second instructions for translating, in a dispatch layer between a TCP layer and an IP layer, the destination address to an intermediate destination address, which is an address for the selected process within the plurality of processes, wherein the instructions are ~~embodies~~ embodied within the computer readable medium.

39. (New) The computer of claim 18, wherein each packet includes a source address and wherein the dispatch layer further includes:

a fifth mode of operation in which the dispatch layer receives a packet from the identified process for the client; and  
a sixth mode of operation, responsive to the fifth mode of operation, in which the dispatch layer translates the source address in the packet of the destination address.

40. (New) The computer of claim 18, wherein the packet routing layer is a transmission control protocol layer.

41. (New) The computer of claim 18, wherein the plurality of processes is a plurality of server daemons.